

REMARKS

Favorable reconsideration of this application in light of the following discussion is respectfully requested. Claims 1-17 are pending in this application. Claims 1 and 16 are independent and amended. Support for the amended claims may be found in paragraphs [0047] to [0049], for example. No new matter has been added.

Claim Rejections under 35 U.S.C. § 103

1. Claims 1, 2-4, 7, 8, 10-13, 16 and 17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hu et al. (U.S. Patent No. 5,430,783, herein Hu) in view of Ning (U.S. Patent No. 6,477,221) and in further view of Besson et al. (U.S. Patent No. 6,459,754, herein Besson). Applicants respectfully traverse this rejection.

Claim 1 requires, *inter alia*, “the approximate weighting takes place on the projection data after interpolating the projection data.” At least this feature is not disclosed or suggested by Hu, Ning, Besson and/or a combination of the three (assuming they are combinable, which Applicants do not admit).¹

Hu is directed towards a reconstruction method for helical scanning computed tomography apparatus with a multi-row detector array employing overlapping beams. More specifically, column 5, line 68 to column 6, line 1 of Hu states “the present invention utilizes data from this extra scanning by weighting it and using it during the backprojecting process on a voxel by voxel basis.”

The Examiner relies on the weighting of Hu to teach the “approximate weighting” of claim 1. However, the weighting of Hu does not occur after interpolation. Moreover, Hu fails to use interpolation. For example, column 10, lines 17-19 of Hu

¹ To be thorough, further expedite prosecution, and for the sake of clarity, Applicants provide discussions of each of the references separately, however, Applicants are not attacking these references individually, but arguing that the references, even taken in combination, fail to

recite, "multiple points are used to generate a composite signal and interpolation, as such, is not used." Applicants have hereby amended claim 1 to clarify the distinctions over Hu. As Hu does not disclose using, interpolation, Hu does not disclose weighting projection data after interpolation, as set forth in claim 1.

Accordingly, Hu fails to disclose the approximate weighting taking "place on the projection data after interpolating the projection data," as required by claim 1. Applicants respectfully submit that even assuming for the sake of argument that Hu, Ning and Besson are combinable (which Applicants do not admit), Ning and Besson fail to disclose the deficiencies of Hu discussed above and, therefore, claim 1 is not rendered obvious by a combination Hu, Ning and Besson. The claims dependent on claim 1 are patentable for at least the reasons set forth above with regards to claim 1.

Claim 16 is a separate independent claim from claim 1, wherein claim 16 contains its own individual limitations. Claim 16 should be interpreted solely based upon limitations set forth therein. However, claim 16 is patentable for at least reasons somewhat similar to those set forth above regarding claim 1.

Arguments against combination of Hu, Ning and Besson

As recited in Applicants' previous response, Applicants submit it is not obvious that one skilled in the art would select precisely the features of Hu, Ning and Besson cited by the Examiner, and would combine the selected features precisely as required by Applicants' claim 1. Of Course, with an "ex post facto" analysis it is almost always possible to extract individual method steps from the prior art and to combine these into a newly described process. However, that is not the view of one skilled in the art. If a method were to suggest itself in its totality at the point in time of invention to one skilled in the art, then concrete references from the prior art would be necessary to

render the claimed invention obvious because all features of claim 1 are not found in the prior art.

motivate him/her, on the one hand to leave out features from existing, closed methods and, on the other hand, to extract exactly those partial aspects from other and also closed functional methods and combine these features into the subject matter of the new method. This motivation does not follow from the cited references or knowledge of one skilled in the art at the time of filing of the Applicants' application.

In light of the above, Applicants request the rejection of independent claims 1 and 16, as well as claims 2-4, 7, 8, 10-13 and 17 depending therefrom, under 35 U.S.C. § 103(a) be withdrawn.

2. Claims 5 and 14 stand rejected under U.S.C. § 103(a) as unpatentable over Hu, Ning, Besson and Lai (U.S. Patent No. 6,118,841). Applicants respectfully traverse this rejection as detailed below.

Applicants respectfully submit that Lai fails to cure the deficiencies of Hu, Ning and Besson as described above with respect to independent claim 1 and thus, respectfully submit that dependent claims 5 and 14 are allowable over Hu, Ning, Besson and Lai for at least the same reasons that independent claim 1 is allowable over Hu, Ning and Besson.

Therefore, Applicants respectfully request that the rejection of claims 5 and 14 under 35 U.S.C. § 103(a) be withdrawn.

3. Claims 6 and 15 stand rejected under 35 U.S.C. § 103(a) over Hu, Ning, Besson, Lai and Silver et al. (U.S. Publication No. 2003/0123614, herein Silver). Applicants respectfully traverse this rejection as detailed below.

Applicants respectfully submit that neither Lai nor Silver, either alone or in any proper combination, cure the deficiencies of Hu, Ning, and Besson as described above with respect to independent claim 1 and thus, respectfully submit that dependent

claims 6 and 15 are allowable over Hu, Ning, Besson, Lai and Silver for at least the same reasons that independent claim 1 is allowable over Hu, Ning and Besson.

Therefore, Applicants respectfully request that the rejection of claims 6 and 15 be withdrawn.

4. Claim 9 stands rejected under 35 U.S.C. § 103(a) over Hu, Ning, Besson, and Gullberg et al. (IEEE Vol. 11, no. 1, June 1992, herein Gullberg). Applicants respectfully traverse this rejection as detailed below.

Applicants respectfully submit that Gullberg fails to cure the deficiencies of Hu, Ning and Besson as described above with respect to independent claim 1 and thus, respectfully submit that dependent claim 9 is allowable over Hu, Ning, Besson and Gullberg for at least the same reasons that independent claim 1 is allowable over Hu, Ning and Besson.

Therefore, Applicants respectfully request that the rejection of claim 9 be withdrawn.

CONCLUSION

Accordingly, in view of the above amendments and remarks, reconsideration of the rejections and allowance of each of pending claims of the present application is earnestly solicited.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicant(s) hereby petition(s) for a one (1) month extension of time for filing a reply to the Office Action and submit the required \$130.00 extension fee herewith.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Donald J. Daley at the telephone number of the undersigned below.

CONCLUSION

Accordingly, in view of the above amendments and remarks, reconsideration of the rejections and allowance of each of pending claims of the present application is earnestly solicited.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicant(s) hereby petition(s) for a one (1) month extension of time for filing a reply to the Office Action and submit the required \$130.00 extension fee herewith.

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If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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